AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for classifying ~~and selecting~~ records, the method comprising:

receiving records containing several fields, the fields of which records contain values,

reading ~~(1002)~~ the values contained in at least two specified fields from each of the received records,

selecting ~~(1001)~~ field-specifically ordered classification structures corresponding to the specified fields, which field-specifically ordered classification structures comprise an own ordered classification structure for each of the specified fields in the received record,

for each record:

searching ~~(1001, 1004, 1007)~~ from the selected classification structures a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to ~~the~~ a value read from ~~the~~ one of said ~~field~~fields, and

forming an intersection set of the sets of suitable classes, and

selecting a class from the intersection set and assigning ~~(1112)~~ the selected class to the record, whereby said assigned class has been read from the field-specifically ordered classification structure.

2. (Currently Amended) A method according to Claim 1, ~~characterized in that~~wherein:

~~sets are formed~~forming an intersection set comprises forming a set on the basis of the values of the fields, in such a way that a set of classes is formed for each field~~,~~; and

further wherein said intersection set comprises a field-specific set that incorporates ~~the~~ service IDs, and ~~the~~ a condition of ~~the~~ a field used in ~~the~~ a conditional statement of ~~the~~ a given class of which is true, ~~are incorporated in the field-specific sets,~~ and-

further wherein selecting a class comprises selecting the class that appears in all of the sets, i.e. whose conditional statement is entirely true~~, is selected (1111)~~.

3. (Currently Amended) A method according to Claim 1 ~~or 2~~, ~~characterized in that~~wherein selecting a class further comprises using the accuracy principle ~~is used~~ to select the class, to which the record is ~~selected~~assigned, from the classes corresponding to ~~the~~ a reference value or reference values, in which case that is selected, from of those corresponding to the reference value or reference values, which has the definition of which the greatest number of classification structure conditions are met.

4. (Currently Amended) A method according to any of Claims 1 - 3, ~~characterized in that~~wherein selecting a class comprises selecting the class to which the record is ~~selected~~assigned ~~is selected,~~ from the classes corresponding to ~~the~~ a reference value or reference values, by applying an intersection or intersections and unions performed using logical operands.

5. (Currently Amended) A method according to ~~any of Claims 1 – 4~~claim 1, ~~characterized in that the reference value is searched from a field-specific classification structure, by~~wherein searching comprises using a search method that is faster than a sequential search, such as a binary search, a tree search, a hash search, and ~~that~~ further wherein the least comparisons are used to find ~~the~~ a reference value according to the value ~~contained in the field is found in an ordered structure in the classification structure~~read from one of said fields.

6. (Currently Amended) A method according to ~~any of Claims 1 – 5~~claim 1, ~~characterized in that the records received~~wherein receiving records comprises receiving records that ~~are formed on the basis of~~contain information regarding the properties of the telecommunications connections.

7. (Currently Amended) A method according to ~~any of Claims 1 – 6~~claim 1, ~~characterized in that~~wherein the fields of the records are fields marked with a field ID.

8. (Currently Amended) A method according to ~~any of Claims 1 – 7~~claim 1, ~~characterized in that~~wherein the fields contain values in various formats, such as numeric and symbolic values ~~are placed in the fields~~, and ~~that~~ further wherein there are specific classification structures for the various formats, and/or indicators to the classification structures.

9. (Currently Amended) A method according to ~~any of Claims 1 – 8~~claim 1, ~~characterized in that~~wherein ~~the~~ said selected ~~classes to which the records are selected are service classes~~class comprises a service class of billable telecommunications services, or a call, and/or types of telecommunications connections.

10. (Currently Amended) A method according to ~~any of Claims 1 – 9~~claim 1, ~~characterized in that the classes, to which the records are selected, are separated~~wherein said selecting comprises separating the classes in the intersection set on the basis of conditions relating to the properties of telecommunications connections.

11. (Currently Amended) A method according to ~~any of Claims 1 – 10~~claim 1, ~~characterized in that~~wherein at least one field identifier corresponds to a field depicting the duration in time of a billable telecommunications connection and/or a field depicting the volume and/or speed of the data transmitted over a billable telecommunications connection.

12. (Currently Amended) A method according to ~~any of Claims 1 – 11~~claim 1, ~~characterized in that~~wherein the received record is a telecommunications network event description record, such as a CDR, ER, IPDR, or UDR.

13. (Currently Amended) A method according to any of Claims 1 - ~~12~~3, ~~characterized in that~~wherein the names of the fields are set to form the entries of the table and for each field at least one operand-specific table according to at least one of the following operands is created, greater than (>), greater than or equal to (>=), less than <, less than or equal to (<=), equal to (=), and not equal to (!=) tables, so that a tree-like field-specific classification structure is created for each specified field.

14. (Currently Amended) A method according to claim 1, ~~characterized in that~~wherein the intersection set includes more than one class and, of these classes, the class with the greatest accuracy is selected during said selecting step, ~~which~~ wherein accuracy is defined on the basis of the number of fields used in ~~the~~ a conditional statement of the class.

15. (Currently Amended) A method according to claim 1, ~~characterized in that~~wherein the intersection set is an empty set and the class is selected in such a way that a review is made of the statement with next lowest accuracy.

16. (Currently Amended) A method according to ~~any of Claims 1 – 15~~claim 1, ~~characterized in that it is~~wherein said method is performed in a mediator system of a telecommunications network.

17. (Currently Amended) A classification system for records~~, which includes a classification system that is arranged~~

——— that is configured to receive records, the fields of which contain values, and

——— to select the records to classes,

~~characterized in that~~wherein the system comprising:

~~the classification structure contains~~ a field-specific classification structure that classifies records according to at least one specified field of the received records,

——— a logic connector that connects logical operands ~~are connected~~ to the field-specific classification structure,

——— a reference structure arrangement unit that arranges ~~the~~ reference values used in the service-class definition suiting each operand relating to each defined field ~~are arranged to form~~ into a separately ordered structure,

——— a class to structure connector that connects classes suiting each reference value ~~are connected~~ to each ordered structure, and

——— ~~the classification system is set to select,~~ a selection unit that selects, to a set class, the classification of a received record.

18. (Currently Amended) A classification system according to Claim 17, ~~characterized in~~ further comprising a condition recorder that records the conditions of the classes ~~are recorded~~ in the classification structure.

19. (Currently Amended) A classification system according to Claim 17 or 18, ~~characterized in that~~further comprising an operand-specific ordered data structure that contains at least one reference value and at least one service ID according to the reference value~~ are recorded in an operand-specific ordered data structure~~.

20. (Currently Amended) A classification system according to Claim 17~~—19~~, ~~characterized in that~~ the ~~field-specifically ordered~~field-specific classification ~~system~~ structure further comprising ~~contains~~ a selection structure based on operands and a class division corresponding to the selections according to the structure.

21. (Currently Amended) A classification system according to ~~any of Claims 17 – 20~~claim 17, ~~characterized in that the classification system contains~~further comprising format-specific classification structures, or format-specific indicators to the classification structures.

22. (Currently Amended) A classification system according to ~~any of Claims 17 – 21~~claim 17, ~~characterized in that the~~wherein reference values in the field-specific classification structure are arranged as an ordered structure ~~essentially~~ in order of magnitude.

23. (Currently Amended) A classification system according to ~~any of Claims 17 – 22~~claim 17, ~~characterized in that the~~the field-specific classification structure comprising

~~classification structures are~~a plurality of separate classification structures, wherein the separate structures are separated on the basis of the form of the symbol used in the classification structure field, such as character-form or numeric.

24. (Currently Amended) A classification system according to ~~any of Claims 17 – 23~~claim 17, ~~characterized in that the field identifier is arranged to correspond to the~~wherein the at least one specified field comprises a field depicting the data-transfer capacity of a billable telecommunications connection.

25. (Currently Amended) A classification system according to ~~any of Claims 17 – 24~~claim 17, ~~characterized in that~~wherein the reference structure arrangement unit arranges the reference values ~~are listed~~ in order of magnitude and/or accuracy.

26. (Currently Amended) A classification system according to ~~any of Claims 17 – 25~~claim 17, ~~characterized in that it is arranged to perform search from the classification structure for the service class set for a received record, according to the method according to any of Claims 1 – 16~~further comprising:

a search engine that searches, for each record, from selected classification structures, a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to a value read from one of said fields, and

an intersection set forming unit that forms an intersection set of the sets of suitable classes.

27. (Currently Amended) A classification system according to ~~any of Claims 17 – 26~~claim 17, ~~characterized in that it is arranged to operate in~~wherein said system is part of a mediator system of a telecommunications network.

28. (Currently Amended) A classification system according to ~~any of Claims 17 – 27~~claim 17, ~~characterized in that the fields are~~wherein the at least one specified field is a field ~~fields~~ marked using a field identifier.

29. (Currently Amended) A classification system according to ~~any of Claims 17 – 28~~claim 17, ~~characterized in that~~wherein values with different formats, such as numeric and symbolic values, are set in the fields and there are specific classifications structures and/or indicators to classification structures for the different formats.

30. (Currently Amended) A classification system according to ~~any of Claims 17 – 29~~claim 28, ~~characterized in that~~wherein at least one field identifier corresponds to a field depicting the duration in time of a billable telecommunications connection and/or a field depicting the volume and/or rate of data transmitted on a billable telecommunications connection.

31. (Currently Amended) A computer-readable medium having embodied thereon a program ~~product~~ that, when executed, causes a computer to execute a method for

classifying records~~, characterized in that it is arranged to perform a method according to any of Claims 1 – 16 and that it includes a classification structure according to any of Claims 17 – 30.~~, the method comprising:

receiving records containing several fields, the fields of which records contain values,

reading the values contained in at least two specified fields from each of the received records,

selecting field-specifically ordered classification structures corresponding to the specified fields, which field-specifically ordered classification structures comprise an own ordered classification structure for each of the specified fields in the received record,

for each record:

searching from the selected classification structures a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to a value read from one of said fields, and

forming an intersection set of the sets of suitable classes, and

selecting a class from the intersection set and assigning the selected class to the record, whereby said assigned class has been read from the field-specifically ordered classification structure.